REMARKS

Applicant expresses disappointment regarding the issuance of an Office Action in lieu of the anticipated Answer to the Appeal Brief filed back in March. Nevertheless, the withdrawal of the improper rejection of claim 1 under Section 112, second paragraph is noted with appreciation.

Rejections Under 35 U.S.C. §112

Turning to the repeated rejections of claims 3-7 under Section 112, second paragraph, Applicant respectfully submits that such are wholly unfounded in fact or law. In light of the withdrawal of the similar rejection of claim 1, there can be no further doubt that it only covers and reads on a trim panel insulator incorporating an acoustical and thermal insulating layer of polymer fiber that is both multidensity and nonlaminate in combination. Thus, a multidensity trim panel insulator incorporating multiple layers of material all having different densities is not covered; rather, it is the presence of multiple densities in a single, nonlaminate *layer* (not a nonlaminate "assembly," "structure," etc.) of a trim panel insulator that establishes the patentability of claim 1 over the prior art.

In support of the rejections of the dependent claims, the contention is made that "Applicant is claiming subject matter *precluded by* the use of 'consisting essentially of language'" in claim 1, and a change is therefore "recommended." Axiomatically, determining what is excluded by use of the "consisting essentially of" transition phrase requires reading the

claim at issue in light of the specification of which it forms a part. Exparte Hoffman 12 USPQ2d 1061 (Bd. Pat. App. & Int. 1989). Of course, this axiom applies equally in the context of determining the definiteness of claims that do not use this transitional phrase. See Adams v. United States, 383 U.S. 39, 148 USPQ 479 (1966) ("it is fundamental that claims are to be construed in light of the specification[] and both are to be read with a view to ascertaining the invention"); Slimfold Mfg. Co. v. Kinkead Indus., Inc., 810 F.2d 1113, 1116, 1 USPQ2d 1563, 1566 (Fed. Cir. 1987) (holding that claims are not interpreted "in a vacuum," but are read and understood in light of the specification of which they are a part); see also MPEP §2173.02 ("Definiteness of claim language must be analyzed not in a vacuum, but in light of: (a) [t]he content of the particular application disclosure; (b) [t]he teachings of the prior art; and (c) [t]he claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.").

Applicant's specification clearly and thoroughly explains that the basic and novel characteristic of the claimed trim panel insulator is a single, multidensity nonlaminate acoustical and thermal insulating *layer*, of which the facing *layers* of dependent Claims 3 and 4 are not a part. Dependent claims 5-7 add limitations, but again, the same basic and novel characteristic is present. Absolutely nothing in the record supports the contention that the "consisting essentially of" language "*precludes*" the features added by the dependent claims, or that the metes and bounds of these claims would somehow not be understood by a skilled artisan in light of the

specification. Accordingly, the rejections of dependent claims 3-7 under Section 112, second paragraph, respectfully lack merit.

Rejections Under 35 U.S.C. §102(b)

Turning to the anticipation rejection based on U.S. Patent 6,008,149 to Copperwheat, it is reiterated that Applicants' invention (claim 1) consists of a trim panel insulator consisting essentially of a single, multidensity nonlaminate acoustical and thermal insulating layer of polymer fiber selected from a group consisting of polyester, a combination of polyester and fiberglass, polypropylene and any mixtures thereof. The basic and novel characteristic of the invention described in this claim is the provision of an acoustical and thermal insulating layer that is both multidensity and a nonlaminate. As a consequence, the trim panel insulator includes areas of relatively high density and areas of relatively low density where appropriate in order to optimize acoustical and thermal insulation performance while simultaneously maintaining the necessary strength and structural integrity to aid in installation and allow a long service life. Advantageously, this is achieved without suffering from the inherent risk of delamination and failure characteristic of prior art laminated liners. As such, the present invention as set forth in Applicants' claim 1 is the antithesis of the liner disclosed in the Copperwheat patent.

More specifically, at column 2 lines 5-45, the Copperwheat patent states:

The non-woven fibrous composite in accordance with the present invention possesses at least two functional layers, all of which are made of the same non-woven thermoformable polymeric chemical substance or material. . . . The polymeric chemical substance selected is fabricated into two different fabrics having different mechanical and/or other physical properties. At least one fabric is a formable fabric, which upon final molding under heat and/or pressure, possesses a relatively high

degree of strength and stiffness. The other fabric is a variable compression fabric... which is capable of assuming variable thickness and density when subjected to molding under heat and/or pressure. . . . The term "composite", as used herein includes any stack of successive layers whether or not cohesion between or among such layers has been enhanced by chemical and/or physical means. Cohesion of adjacent layers of the composite can be enhanced by such techniques as spray powder bonding, use of liquid dispersion/solutions, stitch bonding, flame lamination, use of an intermediate adhesive fabric between functional layers, and mechanical needlepunching, all of which are well known to those versed in the art.

(emphasis added). The Copperwheat patent thus explicitly teaches and describes utilizing multiple laminated layers of material. Such laminated materials must have interfaces between the layers and are thus prone to delamination. In contrast, Applicants' claim 1 explicitly requires a trim panel insulator including a single nonlaminated and multidensity layer that by definition avoids the problem of delamination.

The difference between the invention set forth in Applicants' claim 1 and the invention disclosed in the Copperwheat patent is abundantly clear. The present invention as set forth in claim 1 reads on a trim panel including a single acoustical and thermal insulating layer of polymer fiber of multiple density in order to provide the desired insulating characteristics and necessary structural integrity while simultaneously being a nonlaminate. In contrast, the prior art Copperwheat patent fails to teach or suggest how the desired properties and multiple density can be provided in a single nonlaminated material. In fact, Copperwheat explicitly teaches providing a composite, laminate material of multiple layers where the layers are selected with desired performance characteristics. In teaching a liner of multiple layers (often made from the same material but with different densities) the Copperwheat patent absolutely teaches away from the

nonlaminate acoustical and thermal insulating layer utilized in the presently claimed trim panel.

Where as here a reference "diverge[s] from and teach[es] away from the invention at hand," it is error to find obviousness, much less anticipation. See W.L. Gore & Assoc., Inc. v. Garlock, Inc., 220 USPQ 303, 311 (Fed. Cir. 1983) and In re Fine, 5 USPQ2d 1596, 1599 (Fed. Cir. 1988). In view of the fact that the Copperwheat reference actually teaches away from the present invention, the present invention is only within the skill of one of ordinary skill in the art if Copperwheat's teachings are ignored and hindsight is utilized. See Ex Parte Clapp, 227 USPQ 972 (Bd. Pat. App. & Int. 1985).

The Examiner contends that Applicant's characterization of the Copperwheat invention is incorrect, and that it "clearly makes use of at least one nonlaminate layer that has differing densities": namely, the variable compression fabric described at col. 2, lines 22-24. This assertion completely ignores the context, since the surrounding language very clearly states that this variable compression fabric is laminated to another layer of fabric functioning as an insulator (see, e.g., col. 2, lines 5-12, *supra*, "The non-woven fibrous composite in accordance with the present invention possesses at least two functional layers."). It also overlooks the fact that such an arrangement is clearly excluded by Applicant's claim 1 when properly read in light of the specification.

In final analysis, the Copperwheat patent explicitly teaches that it is only possible to provide a trim panel insulator with the desired insulating and structural characteristics by

laminating multiple layers of material with different properties together. In contrast, the present invention as set forth in claim 1 and claims 3-7 dependent thereon claims a trim panel insulator including a single acoustical and thermal insulating layer of multiple density to provide all the desired insulating and structural properties in the form of a nonlaminate. Such an approach was neither recognized nor considered possible by Copperwheat. Since the invention of Applicants' claim 1 avoids any potential for delamination characteristic of a liner constructed in accordance with the teachings of the Copperwheat patent, it represents a significant advance in the art. Moreover, no evidence in the record supports the contention that the addition of facing layers would "materially affect" this basic and novel characteristic as contended, which makes the Examiner's position untenable. Accordingly, the rejection of claims 1 and 3-7 based upon the Copperwheat patent should be withdrawn and these claims should be formally allowed.

Turning to anticipation rejections of claims 1, 3, 4, 5, 6, 7, and 8-13 over U.S. Patent 5,501,898 to Fottinger et al. With regard to Applicants' claim 1, the foregoing remarks and those previously submitted make clear that it covers a trim insulator panel having a single nonlaminate, multidensity layer. Even assuming for the sake of argument that the pre-compaction step mentioned in Example 1 produces multiple densities (which is not at all clear or otherwise admitted), the Examiner does not convey how Fottinger et al. discloses, teaches, or suggests within its four corners a single, nonlaminated multidensity *layer*, as claimed. Rather, the Examiner's remarks admit that the Fottinger et al. patent discloses a "three layer composite,"

which cannot *per se* possibly qualify as a single, nonlaminate multidensity layer. Accordingly, the newly made anticipation rejection of claim 1 and its progeny based on the Fottinger et al. patent is no more meritorious than the similar rejections based on the Copperwheat patent.

As emphasized in both a previous response and the Appeal Brief, claim 8 reads on a trim panel insulator comprising a single, nonlaminate acoustical and thermal insulating layer 12 of polymer fiber selected from a group consisting of polyester, a combination of polyester and fiberglass, polypropylene and any mixtures thereof. That single, nonlaminate acoustical and thermal insulating layer 12 also includes a nonlaminate skin 14 of polymer fiber along at least one face thereof. The skin 14 has a higher density than a remaining portion of the insulating layer 12.

The Examiner contends that the Fottinger et al. patent "can be a three layer composite" in which case the patent explains that all layers are "pressed and compacted into the intended shape" (see col. 2, lines 16-17). Despite this processing, it must be appreciated that the Fottinger et al. patent explicitly teaches utilizing three distinct layers, and that these layers plainly have interfaces between them. The structure thus formed, or "part" as it is called in the patent, is essentially a laminated one.

This conclusion is buttressed by the examples of the three-layer "part" provided. In particular, Example 2 of the Fottinger et al. patent describes using distinct cover layers and center layers of the "same fiber material" (a mixture of polyethylene terephthalate and

polybutylene terephthalate) having different weights-per-unit area (250 g/m² and 500 g/m²). (see, e.g., example 2, lines 21-32). Likewise, Example 3 describes a three layer "part" including the "outer layers according to example 2" and a central layer having a different weight-per-unit area. These teachings undoubtedly establish the use of separate and distinct layers to form the structure.

In contradistinction, claim 8 reads on a nonlaminate insulating layer with a skin having a higher density than a remaining portion of the insulating layer. Applicants' claimed arrangement is thus a unitary multidensity structure devoid of interfaces between laminate layers. As discussed extensively in the present specification, this lack of interfaces avoids the undesirable delamination characteristic of prior art trim structures such as the one taught in the Fottinger et al. patent.

Stated another way, the claimed multidensity, nonlaminate structure is in no way equivalent to the multidensity laminate structure of the Fottinger et al. patent. In the case of the present invention, only one layer of material is provided and it is devoid of interfaces between layers. As such, any potential for delamination is absolutely eliminated. In contrast, the liner structure of the Fottinger et al. patent includes interfaces between layers that have the potential for delamination. While both products may have the desired insulative and structural characteristics to be used as liners, only the present invention avoids potential failure from delamination. As such, the present invention represents a significant advance in the art.

It should also be appreciated that the Fottinger et al. patent actually teaches away from the present invention. More specifically, the Fottinger et al. patent explicitly teaches that different layers of the same material having different densities must be laminated together in order to provide a liner with the desired insulative and thermal insulating properties. In contrast, the present invention as claimed achieves these goals with a single nonlaminated layer of material incorporating a unitary, higher density skin. No teaching or suggestion of this approach appears in the Fottinger et al. patent.

The Examiner states that the pre-compaction step described in Example 1 in the Fottinger et al. patent "will afford multidensity characteristics to the central layer and will afford a facing surface to said central layer that has a higher density than the interior of said central layer". Fottinger et al. does not expressly disclose this, so it must inherently do so in order for the Examiner's anticipation rejection to be correct. However, "[i]nherent anticipation requires that the missing descriptive material is 'necessarily present,' not merely probably or possibly present, in the prior art." Trintec Indus., Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) (emphasis added). Here, the Examiner has not offered any theory or extrinsic evidence plausibly supporting the conclusion that a high density skin is "necessarily present" as a result of the described precompaction step.

Further, it should be appreciated that the concept of the inventions of claims 1 and 8 never even occurred to Fottinger and his co-inventors. More specifically, compliance with

Section 112 required Fottinger to "set forth the best mode contemplated by the inventor of carrying out his invention." The result is a liner having the desired thermal and insulating properties formed by laminating together layers of the same material having different densities. This was his "best mode" for creating such a liner despite the fact that it is inherently susceptible to delamination along the interfaces between the layers, which is disadvantageous for the various reasons noted in Applicants' specification.

In contrast to the approach disclosed in the Fottinger et al. reference, the present invention provides a trim panel insulator providing all the desired acoustical and thermal insulating characteristics of a multidensity insulator in a nonlaminate that absolutely avoids potential failure as a result of delamination. In explicitly proposing only a liner with multiple layers, the Fottinger et al. reference clearly teaches away from the present invention and absolutely provides no basis whatsoever for a rejection under 35 U.S.C. §103, much less an anticipation rejection under 35 U.S.C. §102(b). As a result, the rejections of the claims based upon the Fottinger et al. patent are unfounded and should be withdrawn.

Finally, new claim 14 is presented for examination. This claim specifies that the insulating layer of claim 1 includes a high density skin. Neither Copperwheat nor Fottinger et al. meets the terms of this claim, since neither discloses a nonlaminate multidensity insulating layer having a high density skin. Accordingly, this new claim is considered allowable as presented.

In summary, Applicant has addressed all issues raised in the Office Action dated May 19, 2004. Since it is believed that all claims are now in condition for allowance, an early notice to this effect is earnestly solicited. However, if the Examiner determines minor or formal issues prevent the issuance of the Notice of Allowance, please contact the Applicant's Counsel at the following telephone number. If any fees are required pertaining to this response, Applicant requests that they be charged to Deposit Account No. 50-0568.

Respectfully submitted,

Maria C. Gasaway

Reg. No. 51,721

Date:

Owens Coming

Owens Corning Patent Dept., Bldg. 11 2790 Columbus Road Granville, Ohio 43023 (740) 321-7213